



## Testimony

Before the Subcommittee on Government Efficiency,  
Financial Management, and Intergovernmental  
Relations, Committee on Government Reform, House  
of Representatives

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# MILITARY BASE CLOSURES

## Overview of Economic Recovery, Property Transfer, and Environmental Cleanup

Statement of Barry W. Holman, Director, Defense  
Capabilities and Management



G A O

Accountability \* Integrity \* Reliability

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<b>Abstract</b> I am pleased to be here today to present our observations on the Department of Defenses (DOD) four rounds of base realignments and closures (BRAC) in 1988, 1991, 1993, and 1995. My comments today are based on work we have done in recent years tracking DODs implementation of the BRAC Commissions recommendations and on the preliminary results of our ongoing work on the status of prior BRAC rounds to include estimated costs and savings, economic impacts, property transfers, and environmental cleanup. We recently issued an update on DODs estimated costs and savings from the former BRAC rounds. 1 Attachment I lists selected reports we and others have completed on the status and implementation of DODs base realignments and closures. Today I want to address (1) the economic recovery of communities affected by base closures, (2) progress in implementing the recommendations of the BRAC Commissions and transferring unneeded BRAC property to other users, and (3) progress in accomplishing environmental cleanup at base closure sites.		
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Mr. Chairman and Members of the Subcommittee:

I am pleased to be here today to present our observations on the Department of Defense's (DOD) four rounds of base realignments and closures (BRAC) in 1988, 1991, 1993, and 1995. My comments today are based on work we have done in recent years tracking DOD's implementation of the BRAC Commissions' recommendations and on the preliminary results of our ongoing work on the status of prior BRAC rounds to include estimated costs and savings, economic impacts, property transfers, and environmental cleanup. We recently issued an update on DOD's estimated costs and savings from the former BRAC rounds.<sup>1</sup> Attachment I lists selected reports we and others have completed on the status and implementation of DOD's base realignments and closures. Today I want to address (1) the economic recovery of communities affected by base closures, (2) progress in implementing the recommendations of the BRAC Commissions and transferring unneeded BRAC property to other users, and (3) progress in accomplishing environmental cleanup at base closure sites.

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## Results in Brief

While some communities surrounding closed bases are faring better than others, most are recovering from the initial economic impact of base closures. The short-term impact can be very traumatic for BRAC-affected communities, but the long-term economic recovery of communities depends on several factors, such as the strength of the national and regional economies and successful redevelopment of base property. Some key economic indicators show that the majority of communities surrounding closed bases are faring well economically in relation to the U.S. rates and show some improvement since the time closures began in 1988. According to the latest annual data, of the 62 communities surrounding major base closures, 43 (or 69 percent) had unemployment rates equal to or lower than the U.S. rate for 2000, as reported by the Department of Labor's Bureau of Labor Statistics. Furthermore, 33 (or 53 percent) of the affected communities had equal or higher average annual per capita income growth rates than the U.S. average rate for 1996-99. Another 7 communities (11 percent) had average annual per capita income growth rates that were in close proximity to the U.S. average rate.

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<sup>1</sup> In July 2001, we reported that DOD will realize significant recurring savings from its realignment and closure actions. See *Military Base Closures: DOD's Updated Net Savings Estimate Remains Substantial* (GAO-01-971, July 31, 2001), pp. 1-3.

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Implementation of BRAC recommendations is essentially completed, but title to only 41 percent of unneeded base property has been transferred. As of August 20, 2001, DOD reported that it has essentially implemented all of the BRAC Commissions' 451 recommendations.<sup>2</sup> In acting on the recommendations, the military services and components designated about 518,300 acres of base property as unneeded. DOD data indicate that 44 percent (or 229,800 acres) of the unneeded property is to be retained by the federal government, and 55 percent (or 285,900 acres) is slated for nonfederal users such as state and local authorities or private parties. Of these amounts, 46 percent of the property slated for federal use has been transferred, and 37 percent of the property slated for nonfederal use has been transferred. The disposition of the remaining 1 percent (or 2,600 acres) of the unneeded property has not yet been decided. Of the 305,900 acres for which title transfer has not occurred, about 48,200 acres (or 16 percent) have been leased to local communities and other users.

While DOD has made progress and established numerous initiatives to expedite cleanup, many cleanup activities remain. Cleaning up environmental contamination on BRAC-affected installations has proven to be costly and challenging for DOD and can delay the transfer of the title of property to other users. DOD expects to continue its environmental efforts well beyond fiscal year 2001, the final year of base closure implementation authority. Of the \$22 billion estimated cost for the entire BRAC program through fiscal year 2001, about \$7 billion (or 32 percent) is associated with environmental cleanup efforts. Furthermore, DOD estimates that \$3.4 billion will be required after fiscal year 2001 for cleanup activities.

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## Background

To enable DOD to close unneeded bases and realign others, Congress enacted BRAC legislation that instituted base closure rounds in 1988, 1991,

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<sup>2</sup> The four BRAC commissions generated 499 recommendations; however, only 451 of these required action because 48 were changed in some manner by recommendations of a later commission. We recently identified two recommendations for which the original plans changed due to circumstances. With respect to the decision from the 1995 BRAC round to close family housing units on Fort Buchanan, Puerto Rico, the DOD Appropriations Act, 1999 (P.L. 105-262, sec. 8142) authorized the Secretary of Defense to retain all or a portion of the units in support of the U.S. Army South's relocation from Panama to Fort Buchanan. Consequently, the recommendation was never implemented. With respect to another decision from the same BRAC round to disestablish the Naval Management Systems Support Office in Chesapeake, Virginia, the Navy disestablished the office but delayed the recommended relocation of personnel and equipment to government-owned space until January 2002 because modifications to the required space are not yet complete.

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1993, and 1995.<sup>3</sup> For the 1991, 1993, and 1995 rounds, special BRAC Commissions were established to recommend specific base realignments and closures to the President, who in turn sent the Commissions' recommendations and his approval to Congress. A special Commission established for the 1988 round made recommendations to the Senate and House Committees on Armed Services. The four commissions generated 499 recommendations—97 major closures and hundreds of smaller base realignments and closures. For the 1988 round, the legislation required DOD to complete its realignment and closure actions by September 30, 1995. For the 1991, 1993, and 1995 rounds, the 1990 act required DOD to complete all closures and realignments within 6 years from the date the President forwarded the recommended actions to Congress. However, property disposal and environmental cleanup actions may continue beyond the 6-year period.

The economic impact on communities near base realignments and closures has been a long-standing source of public anxiety. Because of this concern, DOD included economic impact as one of eight criteria that it used for making BRAC recommendations in the last three rounds. While economic impact did not play as large a role in initial BRAC deliberations as did other criteria and was not a key decision factor, its importance was such that DOD components were required to estimate the economic impact of their recommendations.

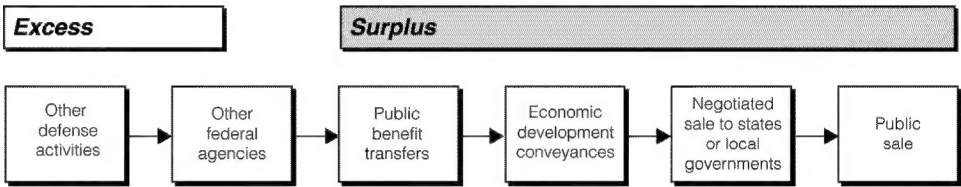
Generally, BRAC property no longer needed by DOD is offered first to other federal agencies. Any property remaining is then disposed of through a variety of means that initially include transfers to states and local governments for public benefit purposes and thereafter is disposed of by negotiated or public sales. Under public benefit conveyances, local redevelopment authorities can obtain property for such purposes as schools, parks, and airports for no or little cost. In 1993, the BRAC act was amended to provide local redevelopment authorities with BRAC property by sale or lease at or below fair market value or without cost for rural communities to promote the economic recovery of areas affected by closures. Later, these provisions were replaced with others that also allowed the transfer of real property at no cost to local redevelopment authorities for job generation purposes or for lease back to the federal

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<sup>3</sup> The 1988 round was completed under the Defense Authorization Amendments and Base Closure and Realignment Act (P.L. 100-526, title XXIX, as amended). The last three rounds were completed under the Defense Base Closure and Realignment Act of 1990 (P.L. 101-510, title II, as amended).

government. Consequently, local redevelopment authorities usually first sought to obtain property at no cost since, failing that, property could still be obtained through negotiated sales. Figure 1 shows the general process used to screen real property under BRAC.

**Figure 1: DOD's Screening Process for BRAC Real Property**



Source: Our analysis.

Many BRAC properties require environmental cleanup. The 1990 BRAC act requires compliance with a provision of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, in transferring contaminated federal property.<sup>4</sup> Under this provision, DOD has a continuing responsibility for cleanup but may, by way of so-called “early transfers,” transfer BRAC property before all cleanups on the property have been completed.<sup>5</sup> Under the early transfer process, either the receiving communities or DOD perform environmental cleanup. In both cases, DOD funds the costs of cleanup.

# Most Communities Are Recovering From the Economic Impacts of Base Closures

While the loss of jobs for DOD civilians and other adverse effects are in the short term inescapable byproducts of base closures, such effects can continue for some time. However, our prior studies and the studies of others indicate that over time many communities have absorbed the economic losses. Several factors affect the economic recovery of communities near base realignments and closures. Local officials have cited the strong national or regional economy as one explanation of why their communities have avoided economic harm and found new areas for growth. In addition, federal programs are available to assist communities in adjusting to base closures. Economic data related to unemployment

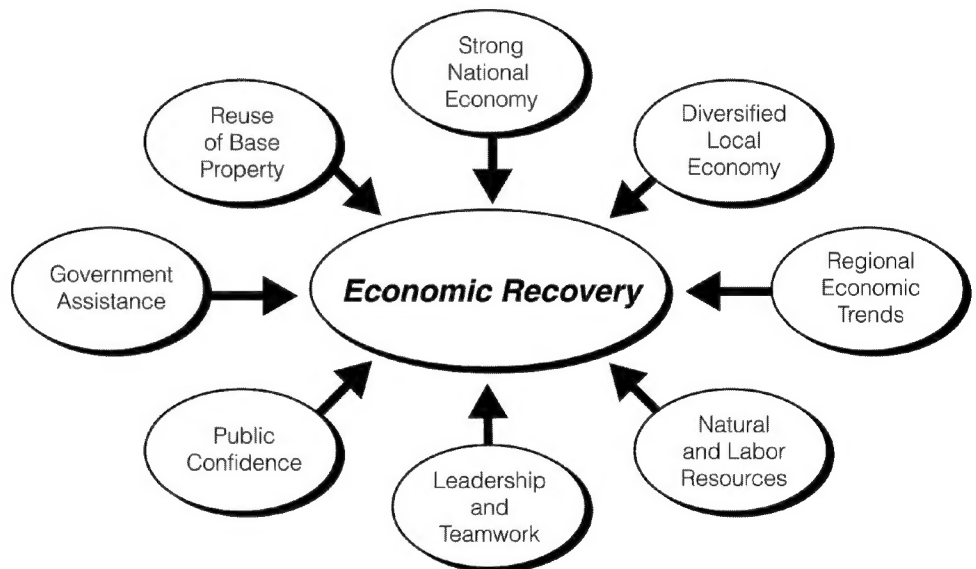
<sup>4</sup> 42 U.S.C. 9620(h)(3).  
<sup>5</sup> Up until 1996, property was generally transferred to a purchaser only after cleanup action had begun. With the passage of section 334 of National Defense Authorization Act for Fiscal Year 1997 (P.L. 104-201), Congress provided the Secretary of Defense the authority to transfer property prior to environmental cleanup if the state’s governor agrees.

rates and average annual real per capita income growth suggest that the majority of communities surrounding closed bases are faring well economically in relation to the U.S. rates and show some improvement since base realignments and closures began with the 1988 BRAC round. In addition, while two communities we recently revisited have progressed in recovering economically, they still face problems.

## Several Factors Help Communities Recover From Base Realignments and Closures

Figure 2 shows several factors that play a role in determining the fate of communities affected by base realignments and closures.

**Figure 2: Factors Affecting Economic Recovery From Base Realignments and Closures**



Source: Our analysis.

Officials from BRAC communities have stressed the importance of having a strong national economy and local industries that could soften the impact of job losses from a base closure. Following the 1991 recession until the recent slowdown, the economic performance of the United States has been robust. In a January 1998 report, we examined defense-related spending trends in New Mexico and the relationship between those trends and New Mexico's economy.<sup>6</sup> We reported that while defense-related

<sup>6</sup> *Defense Spending and Employment: Information Limitations Impede Thorough Assessments* (GAO/NSIAD-98-57, Jan. 14, 1998).



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spending had declined in the state, the state's gross product and total per capita income had increased and that this economic growth might be due to efforts to diversify the economy to counter the loss of defense jobs.

Officials also pointed to regional economic trends at the time of a closure, during the transition period, and at the present. For example, officials from the communities surrounding Fort Devens, Massachusetts, said that at the time of the closure, the area was suffering from the downsizing and restructuring of the computer industry. Those same communities are now benefiting from the economic growth in the larger Boston metropolitan area. Beeville, Texas, where Chase Field Naval Air Station closed, has a long history of farming and ranching but has recently benefited from an expanding state prison industry.

An area's natural resources also can help economic recovery. In Blytheville, Arkansas, for example, where Eaker Air Force Base closed, the steel industry found a foothold in the late 1980s before the announcement of the base closure and has been a growing presence ever since. The Blytheville area is attractive to the steel companies because of its access to the Mississippi River and a major interstate as well as an available labor pool.

Officials from communities surrounding closed bases said that publicizing redevelopment goals and efforts for former bases is key for attracting industry and helping the community gain confidence. Leadership and teamwork among participants at the federal, state, and local levels are essential to reaching agreement on key issues such as property transfer, base reuse, and environmental cleanup. To help communities to successfully transform closing bases into new opportunities, federal agencies have provided over \$1.2 billion in direct financial assistance to areas affected by base closures. This assistance was in numerous forms—planning assistance to help communities determine how they could best develop the property, training grants to provide the workforce with new skills, and grants to improve the infrastructure on bases.

Finally, the redevelopment of base property is widely viewed as a key component of economic recovery for communities experiencing economic dislocation due to jobs lost from a base closure. The closure of a base makes buildings and land available for use that can generate new economic activity in the local community.

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## Most Communities' Economic Indicators Compare Favorably to U.S. Rates

Our analysis of selected indicators shows that the economies of many BRAC-affected communities compare favorably to the overall U.S. economy. We used unemployment rates and real per capita income growth rates as broad indicators of the economic health of those communities where base closures occurred during the BRAC rounds.<sup>7</sup> We identified 62 communities surrounding base realignments and closures from all four BRAC rounds for which government and contractor civilian job losses for each were estimated to be 300 or more.<sup>8</sup>

## Unemployment Rates Compare Favorably

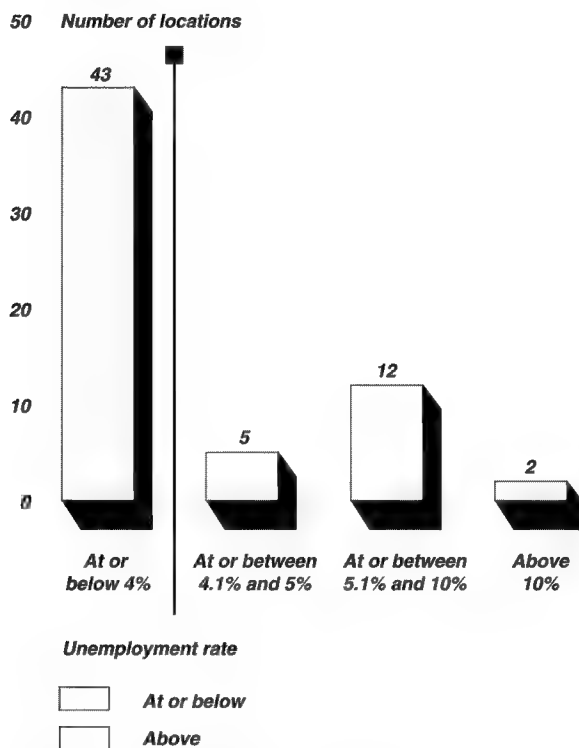
Our analysis of calendar year 2000 unemployment rates indicates that the rates for 62 BRAC-affected communities compare favorably with the U.S. rate. Forty-three (or 69 percent) of the 62 communities affected by the recent base closures had unemployment rates at or below the U.S. rate of 4 percent (see fig. 3).

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<sup>7</sup> Ideally, to assess how the local communities fared after each BRAC round, economic information is needed on how those communities would have fared without each BRAC round compared to how they have fared since the BRAC program began. Because we did not have this baseline data, we used the national averages for unemployment and real per capita income as a benchmark to compare how well the communities have fared. This comparison does not isolate economic effects of a base closure from the effects of other economic events occurring in a particular region.

<sup>8</sup> One of the limitations of our approach to selecting communities is that some areas may have also been the receiving location for DOD realignments and may have gained jobs. For example, St. Mary's County, Maryland, is included because of the closure of Navy facilities at St. Ingoes, Maryland, in the 1993 BRAC round. However, in the 1995 round, the area gained jobs at the Patuxent River facilities due to the relocation of Navy activities from the Washington, D.C., metropolitan area. Despite these gains, the communities we selected for our analysis lost a significant number of DOD jobs.

**Figure 3: Unemployment Rates of 62 BRAC-Affected Communities Compared to U.S. Rate in 2000**



Note: Each of these 62 communities, from all four BRAC rounds, lost an estimated 300 or more government and contractor civilian jobs.

Source: Our analysis of Department of Labor data.

Attachment II compares the 2000 unemployment rate for each of the BRAC-affected locations, grouped by east and west of the Mississippi River for ease of presentation, to the U.S. rate.

The unemployment situation is about the same as we reported in 1998.<sup>9</sup> At that time, 42 (68 percent) of the 62 communities had unemployment rates at or below the then U.S. rate of 5.1 percent. For example, the 2000 unemployment rate for the Salinas area surrounding the former Fort Ord, California, dropped to 9.7 percent from 10.3 percent in 1997. Similarly, the

<sup>9</sup> *Military Bases: Status of Prior Base Realignment and Closure Rounds* (GAO/NSIAD-99-36, Dec. 11, 1998).

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rate for the communities near the former Naval Station and Shipyard, Charleston, South Carolina, decreased to 3 percent from 4 percent in 1997.

For all BRAC-affected communities we examined with a higher average 2000 unemployment rate, only two—the Merced area surrounding the former Castle Air Force Base, California, and the Blytheville area surrounding the former Eaker Air Force Base, Arkansas—have had double-digit unemployment rates: 14.1 percent and 10.1 percent, respectively. The Merced area also had double-digit unemployment when we reported on this issue in December 1998. Local officials told us that these locations have historically had high unemployment rates, partly because of the large seasonal employment associated with the local agriculture.

In a 1996 RAND National Defense Research Institute report on the effects of military base closures on three local communities, RAND concluded that “while some of the communities did indeed suffer, the effects were not catastrophic (and) not nearly as severe as forecasted.”<sup>10</sup> RAND’s analysis showed that the burden of defense cutbacks such as base closures tended to fall more on individuals and companies rather than on the community. For example, a base with a large civilian employment might displace many workers, but the overall employment rate of the community might remain relatively stable. Finally, RAND demonstrated that economies of all types of communities can also be affected by longer term patterns of population and economic growth; the redirection of military retirees’ retail and medical expenditures from the base to the local community; and the withdrawal of working spouses from the local labor market, which frees up jobs for other local citizens.

In a 2000 Massachusetts Institute of Technology report for the Department of Commerce, the Institute noted that military-base employment losses did not necessarily translate into employment losses in counties where bases were closed.<sup>11</sup> In its analysis of 51 counties containing 52 closed bases, 21 counties (or 41 percent) in 1997 had greater post-closure job growth rates relative to the national average, and in 6 of those counties the job growth was more than twice the national average. In the remaining 30 counties,

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<sup>10</sup> *The Effects of Military Base Closures on Local Communities: A Short-Term Perspective*, RAND National Defense Research Institute, 1996.

<sup>11</sup> *From Barracks to Business: The M.I.T. Report on Base Redevelopment*, Economic Development Administration, Department of Commerce, March 2000, pp. 131 and 132.

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Average Annual Real Per  
Capita Income  
Growth Rates Compare  
Favorably

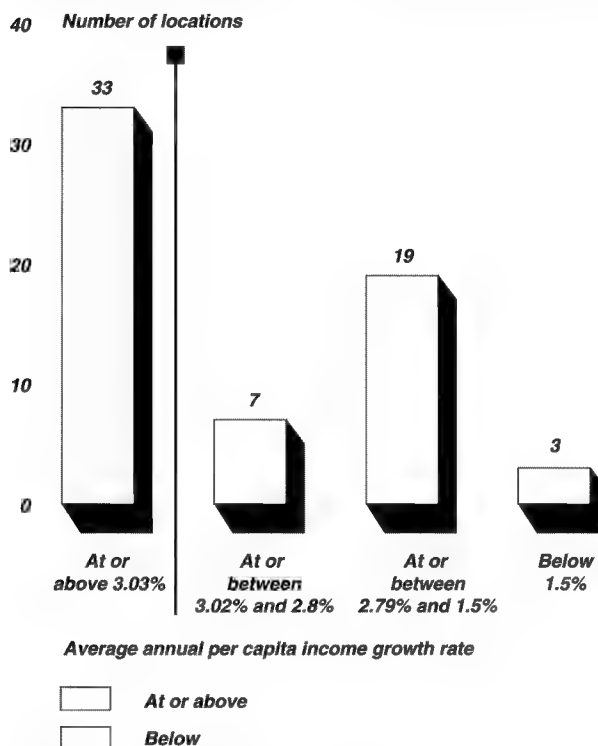
job growth was lower than the national average, of which 7 counties had job losses. The Institute concluded that redevelopment of closed bases will take at least 20 years or more and that time is needed to identify promising companies, persuade them to locate on the closed base, find a suitable site, negotiate an acceptable lease or sale, recruit qualified workers, and find jobs that match worker skills and expectations.

As with unemployment rates, our analysis indicates that average annual real per capita income growth rates for 62 BRAC-affected communities compare favorably with the U.S. average rate. During 1996-99, 33 communities (or 53 percent) had average annual per capita income growth rates that were at or above the U.S. average rate of 3.03 percent (see fig. 4).<sup>12</sup> Another seven communities (or 11 percent) had average annual per capita income growth rates that were in close proximity to the U.S. average rate of 3.03.

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<sup>12</sup> As of August 10, 2001, average annual real per capita income rates for 2000 were not available for analysis.

**Figure 4: Average Annual Per Capita Income Growth Rates of 62 BRAC-Affected Communities Compared to U.S. Average Rate During 1996-99**



Note: Each of these 62 communities, from all four BRAC rounds, lost an estimated 300 or more government and contractor civilian jobs.

Source: Our analysis of Department of Commerce data.

Attachment III compares the 1996-99 average annual real per capita income growth rate for each of the BRAC-affected locations, grouped by east and west of the Mississippi River for ease of presentation, to the U.S. average rate.

During the same period, the rate for communities near the former Fort Ord, California, increased 6.4 percent from the \$27,620 rate in 1997 to \$29,393.<sup>13</sup> In addition, the rate for communities near the former Naval Station and Shipyard, Charleston, South Carolina, increased 9 percent from the \$21,092 rate in 1997 to \$22,944. Currently, all of the 29

<sup>13</sup> Adjusted to 1999 dollars.

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communities below the U.S. average rate had positive average annual per capita income growth rates.

In an analysis of 51 counties containing 52 closed bases, the Massachusetts Institute of Technology reported that 31 counties (or 61 percent) had per capita income greater in 1997 relative to the national rate than it was at the time of the BRAC closing announcement.<sup>14</sup> However, the counties containing the four closed naval shipyards—Mare Island and Long Beach Naval Shipyards, California; Philadelphia Naval Shipyard, Pennsylvania; and Charleston Naval Shipyard, South Carolina—did not fare well. In addition, 10 of the 20 counties that lost income relative to the national rate were in California and most of the other counties that lost income were rural, such as Aroostook County, Maine; Clinton County, New York; Bee County, Texas; and Tooele County, Utah.

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## Economic Recovery Is Continuing at Communities Surrounding Former Bases We Visited

In our 1998 report, we augmented our use of broad economic indicators with visits to selected communities to learn firsthand how they had fared economically after base closures.<sup>15</sup> We reported that in general, the communities surrounding the six major base closure sites we visited suffered initial economic disruption, including decreased retail sales; declining residential real estate values; and social losses felt in local schools, churches, and organizations. However, we also reported that these initial losses were followed by recovery. We are currently updating this information and plan to visit several of the communities we visited previously and additional communities to obtain more in-depth information on their economic recovery. We recently revisited communities surrounding two of the major base closures—Beeville, Texas, near the former Chase Field Naval Air Station, and Merced and Atwater, California, near the former Castle Air Force Base—that we reported on in 1998. As attachment IV discusses in more detail, we found that each community has continued its economic recovery from the base closures, but some problems still exist.

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<sup>14</sup> *From Barracks to Business*, Department of Commerce, March 2000, p. 132.

<sup>15</sup> *Military Bases* (GAO/NSIAD-99-36, Dec. 11, 1998).

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## BRAC Actions Are Essentially Completed, but Transfer of Unneeded Base Property Is Only Partially Complete

As of August 20, 2001, DOD reported that it has essentially implemented all of the BRAC Commissions' 451 recommendations. Despite timely completion of actions on the recommendations, transfer of unneeded base property is only partially complete.

DOD has decided how to dispose of about 99 percent of the 518,300 acres that the military services and components reported they do not need. DOD data as of June 2001 indicate that 229,800 acres (or 44 percent) will be retained by the federal government, 285,900 acres (or 55 percent) of the unneeded BRAC property will be transferred to nonfederal entities, and the disposition of 2,600 acres (less than 1 percent) has not yet been determined.

About 206,800 acres (or 90 percent) of the federally retained property are being transferred to the Departments of the Interior and Justice for uses such as wildlife habitats and detention centers. DOD intends to retain about 14,500 acres (or 6 percent) for, among other things, administrative space for the Defense Finance and Accounting Service. DOD is actually retaining more property than this because, in many cases, during the BRAC process the property of an active military base was turned over to a reserve component without being declared excess. In our 1998 report, we noted that DOD data indicated that over 330,000 acres of BRAC property were being retained for use by the reserve components.<sup>16</sup>

While DOD has plans to transfer most of its unneeded property, fewer actual transfers than planned have taken place. In our December 1998 report, we noted that progress in transferring the title of BRAC properties to users had been affected by many factors. These factors included the iterative process of preparing site-specific reuse plans, preparing conveyance documentation, and environmental cleanups. As of June 2001, DOD data indicate that title to 212,400 acres (or 41 percent) of the 518,300 acres of unneeded property had been transferred to federal and nonfederal entities. Specifically, title to about 106,600 acres had been transferred to federal agencies and title to about 105,800 acres had been transferred to nonfederal entities. According to DOD officials, the transfer of the remainder of the property for federal agencies and nonfederal entities will

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<sup>16</sup> About 324,000 acres of this amount are attributable to five Army BRAC 1995 round bases—Fort Hunter Liggett, California; Fort Chafee, Arkansas; Fort Pickett, Virginia; Fort Dix, New Jersey; and Fort McClellan, Alabama.



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be completed by 2007 and 2029, respectively.<sup>17</sup> As discussed previously, the disposition of 2,600 acres has not yet been determined.

While awaiting property transfers, communities and others can sometimes begin using base property through leasing. Of the 305,900 acres for which title has not been transferred, about 48,200 acres (or 16 percent) have been leased. According to community representatives, leasing is a useful interim measure to promote reuse and job creation.

As noted earlier, Congress authorized the transfer of property prior to the completion of environmental cleanup, but the authority has been used in a limited number of instances and its implementation is still evolving. Program officials believe this approach is a powerful tool to help local communities obtain early ownership and control of property, thereby allowing for earlier reuse than otherwise possible. At the end of fiscal year 2000, DOD had transferred 10 properties at 8 BRAC-affected installations using the early transfer authority. The properties range from 12 acres to about 1,800 acres. In most of the transfers, DOD has continued the cleanup activities, but in some cases the new property owner is cleaning up the property.<sup>18</sup> The advantage to the recipient in performing the cleanup is the ability to integrate cleanup and redevelopment activities, thus saving time and costs and gaining greater control for both activities.

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## Environmental Cleanup Is Progressing but Will Require Many Years to Fully Complete

While DOD has made progress and has established numerous initiatives to expedite environmental cleanups, many cleanup activities remain. As of September 30, 2000, 99 of 204 BRAC installations requiring cleanup had cleanups under way or completed. DOD estimates that 80 additional installations will have cleanups under way or completed by fiscal year 2003, and the remaining 25 installations will have cleanups under way or completed during fiscal years 2004 through 2015. However, DOD projects that long-term monitoring will be required at some sites well after 2015 to ensure those cleanup actions are effective.

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<sup>17</sup> Army officials were reluctant to provide estimates of land transfers beyond 2007 primarily because of uncertainties related to environmental restoration activities so far in the future.

<sup>18</sup> The Port of Oakland is doing the cleanup of the Fleet & Industrial Supply Center, Oakland, California, transferred in 1999, and the Government of Guam is cleaning up Agana Naval Air Station, Guam, transferred in 2000.

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Several factors have affected the progress of DOD's environmental cleanup activities. According to DOD officials, changes in the anticipated use of an installation have occasionally created stricter cleanup requirements that have increased the cost and time needed to put remedies in place. For example, a site on Fort Ord, California, which was originally planned to have limited reuse, is now slated to become a residential area, necessitating more extensive environmental and unexploded ordnance inspection and cleanup. DOD also continues to complete investigations and conduct long-term monitoring at contaminated sites, which can reveal additional previously unknown contamination. For example, at a site on McClellan Air Force Base, California, the Air Force discovered traces of plutonium mixed in with radium-contaminated rags and brushes. The intensive procedures needed to deal with plutonium have increased the estimated cost from less than \$10 million to \$54 million and extended scheduled completion to 2034.

Of the \$22 billion estimated cost for implementing the BRAC program through fiscal year 2001,<sup>19</sup> about \$7 billion, or 32 percent, is associated with base closure environmental activities. Furthermore, DOD estimates that \$3.4 billion will be required after fiscal year 2001 for environmental activities (see fig. 5).<sup>20</sup> This is a \$1 billion increase over the \$2.4 billion environmental cost estimate DOD reported in fiscal year 1999. DOD officials attributed this increase primarily to the inclusion of cleanup costs for unexploded ordnance, delays in the program, the refinement of cleanup requirements and DOD's cost estimates, and the use of more stringent cleanup standards due to changes in how closed installations will be used. As noted in our July 2001 report, DOD has reported that the vast majority of its BRAC environmental cleanup costs would have been

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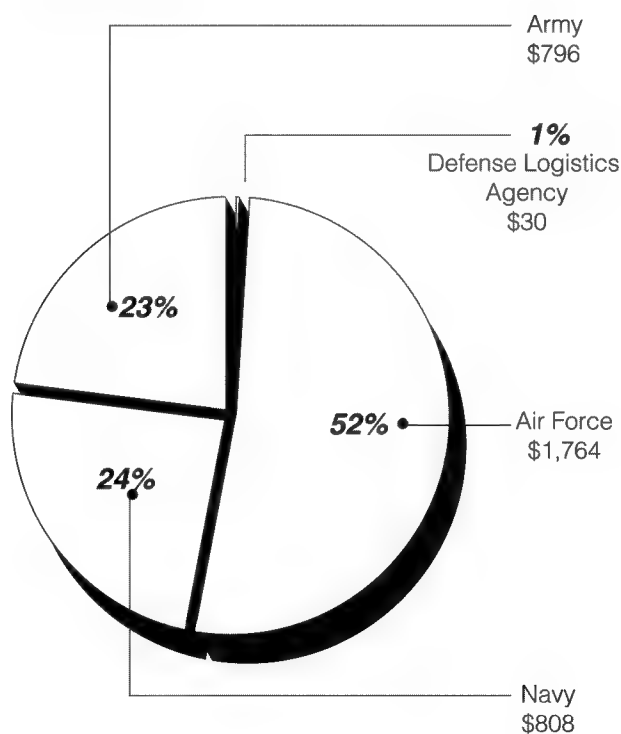
<sup>19</sup> While cost estimates are routinely updated and tracked in financial accounting systems, they are based on DOD obligations and not actual outlays, thereby adding a degree of imprecision to the actual costs and the basis for savings projections. The results of our most recent financial audit at DOD show that the Department does not have the systems and processes in place to capture required cost information. See *DOD Financial Management: Integrated Approach, Accountability, and Incentives Are Keys to Effective Reform* (GAO-01-681T, May 8, 2001), p. 5.

<sup>20</sup> At the same time, uncertainties exist regarding the full cost of environmental restoration beyond fiscal year 2001 because DOD does not have complete and accurate data needed to estimate cleanup costs of unexploded ordnance, such as bombs and ammunition, and other constituent contamination, such as propellants and explosives, on closed training ranges. See *Environmental Liabilities: DOD Training Range Cleanup Cost Estimates Are Likely Understated* (GAO-01-479, Apr. 11, 2001), pp. 4-6.

incurred whether or not an installation is impacted by BRAC.<sup>21</sup> DOD acknowledges, however, that environmental costs under the BRAC process may have accelerated in the shorter term. Others suggest that in some instances BRAC-related environmental cleanups may be done more stringently than would have been the case had the installation remained open. However, the marginal difference is not easily quantified and depends largely on the final use of the closed installation.

**Figure 5: DOD's Estimated Environmental Cleanup Cost at Base Closure Sites after Fiscal Year 2001**

(Dollars in millions)



**Total: \$3,398**

Source: Our analysis of DOD data as of July 2001.

<sup>21</sup> *Environmental Liabilities* (GAO-01-971, July 31, 2001).

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The Air Force's base closure environmental activities account for 52 percent of the total estimated costs after fiscal year 2001. About \$417 million of the Air Force's approximated costs of \$1.8 billion is for the cleanup of the former McClellan Air Force Base.

Navy officials indicated that they were revising the \$808 million cost estimate for base closure environmental activities and believe that the estimate could increase by \$142 million. Continuing negotiations with federal and state regulators is the major cost driver, as regulators have requested the Navy to apply more stringent standards for cleanups than originally planned. For example, during the closure of Dallas Naval Air Station, Texas, the state and local regulators asked the Navy to clean former industrial sites to residential levels, which required more extensive cleanup and increased cost.

Army officials are also revising their \$796 million cost estimate for base closure environmental activities due to better estimates for restoration of land with unexploded ordnance. They estimate that removal of unexploded ordnance may account for \$308 million of the Army's revised estimate, of which \$254 million is estimated to remove unexploded ordnance from two locations—the former Fort Ord, California, and the former Camp Bonneville, Washington. Still, Army officials said that their cost estimates for base closure environmental activities beyond fiscal year 2001 could change based on the proposed land use. For example, the Army estimates that it will cost about \$77 million to remove unexploded ordnance from the former Camp Bonneville so that it can be used as a park. However, officials said that if two-thirds of the land, which is heavily wooded, became a conservation area with institutional controls that limit public access, cleanup costs could be reduced significantly.

DOD has implemented a Fast-Track Cleanup Program to speed the recovery of communities affected by the BRAC program. A key element of the cleanup program is the cooperative relationship between state and federal regulators and the installation environmental program manager. This team approach is intended to reduce the time to establish and execute cleanup plans. The program also seeks better integration of cleanup efforts with the community's plan for using the properties, and it may also help to contain some environmental cleanup costs.

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The Congressional Budget Office reported in 1996 that DOD could reduce costs by delaying expensive cleanup projects if contamination poses no imminent threat and it lacks cost-effective cleanup technologies.<sup>22</sup> The Office also stated that in the long run, new cleanup technologies represented the best hope of addressing environmental problems with available DOD funds.

We have also reported that there are various options for reducing these costs. In 1996, we noted that cleanup costs at closing bases could be reduced by deferring or extending certain cleanup actions, adopting more cost-effective cleanup technologies, and sharing costs with the ultimate user of the property.<sup>23</sup> We also reported that these options might adversely affect programmatic goals, thereby presenting decisionmakers with difficult choices in developing a cost-effective environmental program.

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This concludes my statement. I would be pleased to answer any questions you or other members of the Subcommittee may have at this time.

### **Contacts and Acknowledgments**

For further contacts regarding this statement, please contact Barry W. Holman at (202) 512-8412 or Mark Little at (202) 512-4673. Individuals making key contributions to this statement include Michael Kennedy, James Reifsnyder, Charles Perdue, Robert Poetta, Arnett Sanders, John Lee, Tom Mahalek, and John Buehler.

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<sup>22</sup> *Closing Military Bases: An Interim Assessment*, Congressional Budget Office, December 1996.

<sup>23</sup> *Military Base Closures: Reducing the High Costs of Environmental Cleanup Requires Difficult Choices* (GAO/NSIAD-96-172, Sept. 5, 1996).

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# Attachment I: Key Reports on the Status and Implementation of DOD's Base Realignment and Closures

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*Military Base Closures: DOD's Updated Net Savings Estimate Remains Substantial* (GAO-01-971, July 31, 2001).

*Environmental Liabilities: DOD Training Range Cleanup Cost Estimates Are Likely Understated* (GAO-01-479, Apr. 11, 2001).

*Military Base Closures: Unexpended Funds Raise Questions About Fiscal Year 2001 Funding Needs* (GAO/NSIAD-00-170, July 7, 2000).

From Barracks to Business: The M.I.T. Report on Base Redevelopment, Economic Development Administration, Department of Commerce, March 2000.

*Military Base Closures: Potential to Offset Fiscal Year 2000 Budget Request* (GAO/NSIAD-99-149, July 23, 1999).

*Military Bases: Status of Prior Base Realignment and Closure Rounds* (GAO/NSIAD-99-36, Dec. 11, 1998).

*Military Bases: Review of DOD's 1998 Report on Base Realignment and Closure* (GAO/NSIAD-99-17, Nov. 13, 1998).

Review of the Report of the Department of Defense on Base Realignment and Closure, Congressional Budget Office, July 1, 1998.

Audit Report: Cost and Savings for 1993 Defense Base Realignments and Closures, Department of Defense Office of the Inspector General (Report No. 98-130, May 6, 1998).

The Report of the Department of Defense on Base Realignment and Closure, Department of Defense, April 1998.

*Defense Infrastructure: Challenges Facing DOD in Implementing Reform Initiatives* (GAO/T-NSIAD-98-115, Mar. 18, 1998).

Base Realignment and Closure 1995 Savings Estimates, U.S. Army Audit Agency (Audit Report AA97-225, July 31, 1997).

*Military Bases: Lessons Learned From Prior Base Closure Rounds* (GAO/NSIAD-97-151, July 25, 1997).

The Effects of Military Base Closures on Local Communities: A Short-Term Perspective, RAND National Defense Institute, 1996.

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Closing Military Bases: An Interim Assessment, Congressional Budget Office, December 1996.

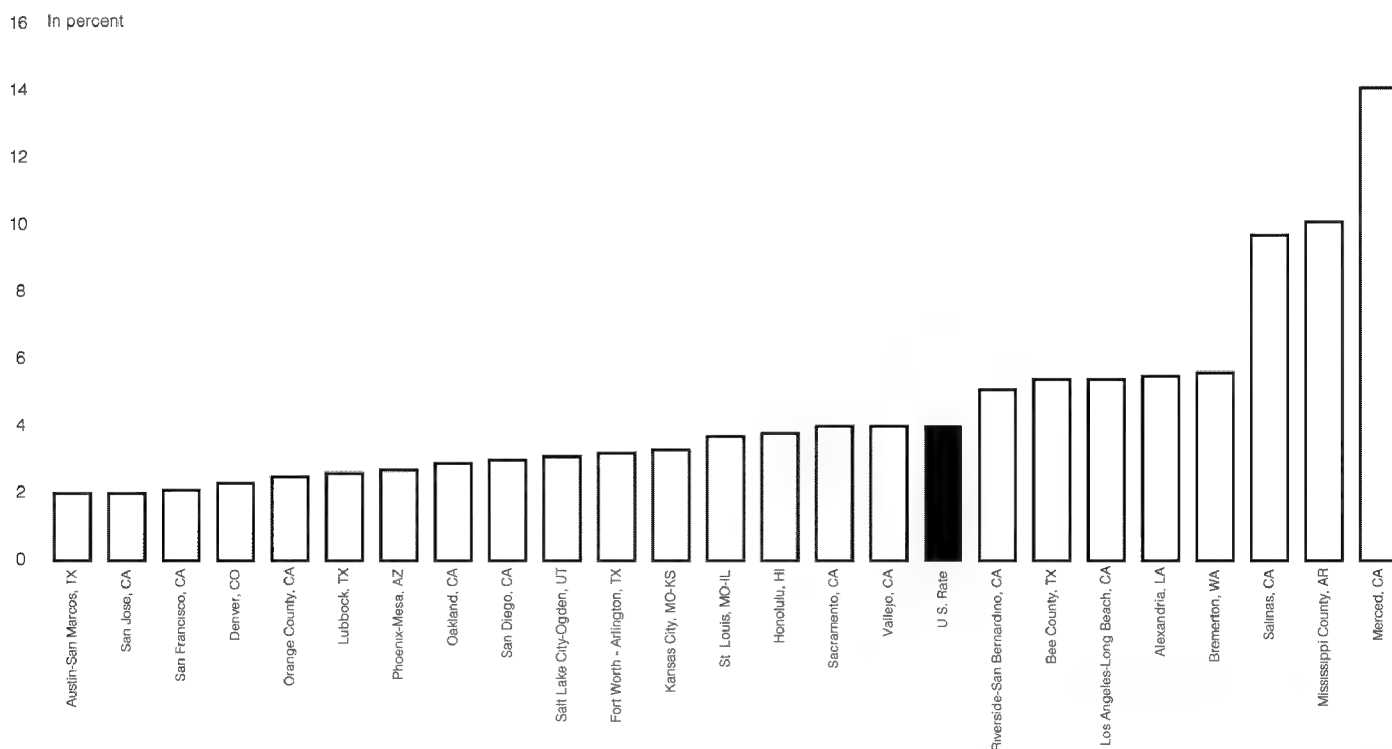
*Military Base Closures: Reducing High Costs of Environmental Cleanup Requires Difficult Choices* (GAO/NSIAD-96-172, Sept. 5, 1996).

*Military Bases: Closure and Realignment Savings Are Significant, but Not Easily Quantified* (GAO/NSIAD-96-67, Apr. 8, 1996).

# Attachment II: Unemployment Rates of BRAC-Affected Areas Compared to the U.S. Rate

As shown in figure 6, 16 (67 percent) of the 24 BRAC-affected local locations west of the Mississippi River had unemployment rates less than or equal to the U.S. rate of 4 percent in 2000. The other eight locations had unemployment rates greater than the U.S. rate.

**Figure 6: Unemployment Rates of 24 BRAC-Affected Locations West of the Mississippi River Compared to the U.S. Rate in 2000**



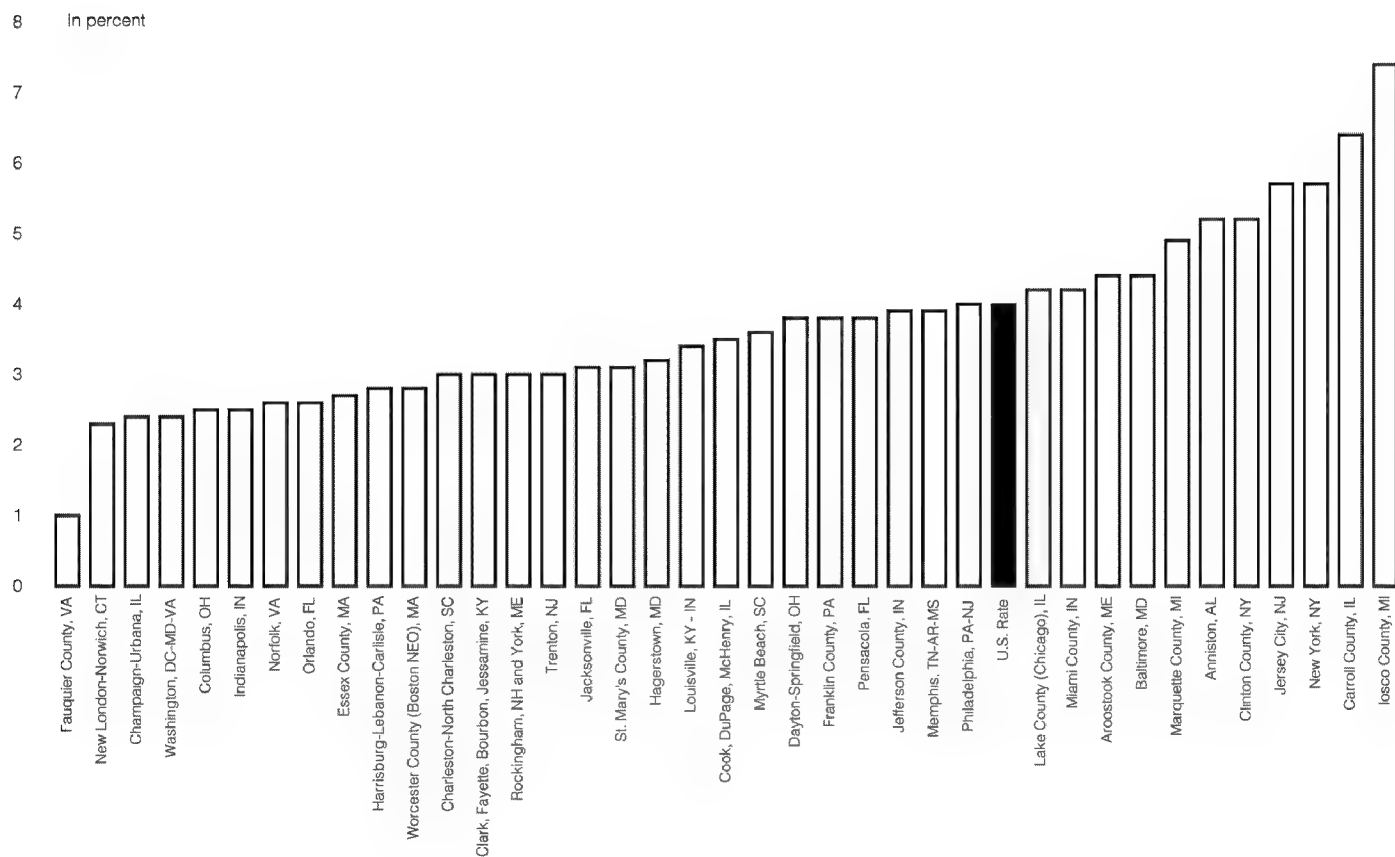
Note: Each of these communities, from all four BRAC rounds, lost an estimated 300 or more government and contractor civilian jobs.

Source: Our analysis of Department of Labor data.

As shown in figure 7, 27 (or 71 percent) of the 38 BRAC-affected local locations east of the Mississippi River had unemployment rates less than or equal to the U.S. rate of 4 percent in 2000. The other 11 locations had unemployment rates greater than the U.S. rate.



**Figure 7: Unemployment Rates of 38 BRAC-Affected Locations East of the Mississippi River Compared to the U.S. Rate in 2000**



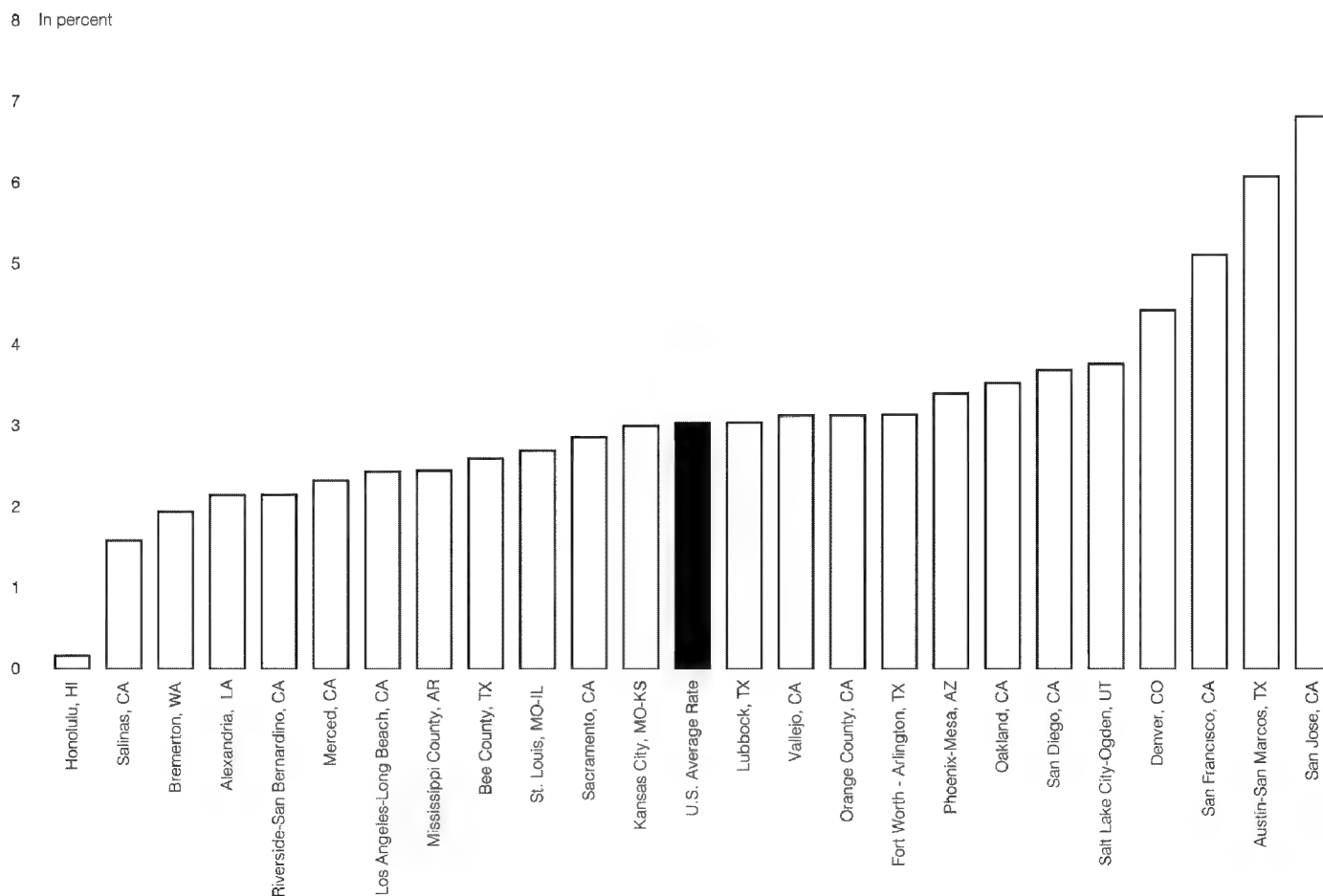
Note: Each of these communities, from all four BRAC rounds, lost an estimated 300 or more government and contractor civilian jobs.

Source: Our analysis of Department of Labor data.

# Attachment III: Average Per Capita Income Growth Rates of BRAC-Affected Areas Compared to the U.S Average Rate

As shown in figure 8, 12 (or half) of the 24 BRAC-affected local locations west of the Mississippi River had average annual per capita income growth rates that were greater than the U.S. average growth rate of 3.03 percent during 1996-99. The other 12 locations had rates below the U.S. average rate.

**Figure 8: Average Annual Real Per Capita Income Growth Rates of 24 BRAC-Affected Locations West of the Mississippi River Compared to the U.S. Average Rate During 1996-99**

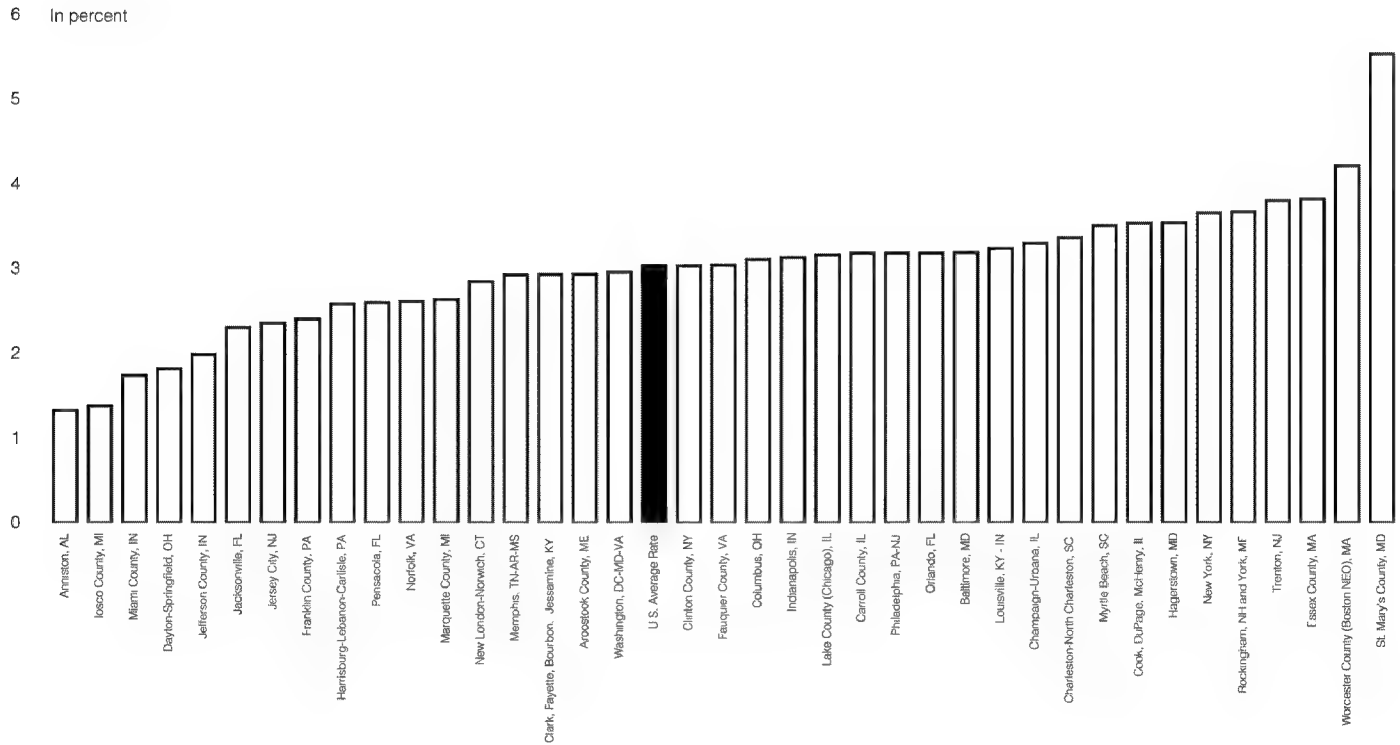


Note: Each of these communities, from all four BRAC rounds, lost an estimated 300 or more government and contractor civilian jobs.

Source: Our analysis of Department of Commerce data.

As shown in figure 9, 21 (or 55 percent) of the 38 BRAC-affected local locations east of the Mississippi River had average annual per capita income growth rates that were greater than or equal to the U.S. average growth rate of 3.03 percent during 1996-99. The other 17 locations had rates below the U.S. average rate.

**Figure 9: Average Annual Real Per Capita Income Growth Rates of 38 BRAC-Affected Locations East of the Mississippi River Compared to the U.S. Average Rate During 1996-99**



Note: Each of these communities, from all four BRAC rounds, lost an estimated 300 or more government and contractor civilian jobs.

Source: Our analysis of Department of Commerce data.

# Attachment IV: Economic Recovery Is Continuing at Communities Surrounding the Former Chase Field Naval Air Station and Castle Air Force Base

In 1998, we reported that in general, the communities surrounding the six major base closure sites we visited suffered initial economic disruption, including decreased retail sales; declining residential real estate values; and social losses felt in local schools, churches, and organizations.<sup>1</sup> However, we also reported that this initial period was followed by recovery. We recently revisited communities surrounding two of the major base closures—Beeville, Texas (Chase Field Naval Air Station), and Merced and Atwater, California (Castle Air Force Base), and found that both have continued their economic recovery from the base closures but still have some problems.

Table 1 shows how the closure of Chase Field Naval Air Station in February 1993 affected the surrounding communities and activities, as indicated by local officials during our visits in 1998 and 2001.

Table 1: Community Impacts Resulting From the Closure of Chase Field Naval Air Station, as Reported in 1998 and 2001	
<b>Overview</b> Bee County and the surrounding counties are generally rural and agriculture and ranching are industries in the area. The largest economic sectors in Bee County are now state and local government, trade, and services.	
As we reported in 1998	As we found during our recent visit in 2001
1997 unemployment rate of 5.9 percent.	2000 unemployment rate of 5.4 percent.
Average real per capita income growth (1991-95) 0.5 percent.	Average real per capita income growth (1996-99) 2.59 percent.
Sales of expensive items, such as automobiles, dropped.	Sales of new automobiles remain low, while used automobile sales have increased.
Automobile dealerships had to reduce staff, and some businesses closed, including high-end clothing stores, a discount department store, an automobile dealership, a local janitorial service, a tortilla factory, and about four convenience stores.	New motel, theater, and water treatment plant built, and one of two large grocery stores closed. New hospital wing added to accommodate a significant increase in hospital patients treated. County sales tax revenues increased slightly.
Real estate values in the residential market declined, and housing in the \$75,000-plus range remained stagnant.	Real estate values in the residential market increased, with new home building growth for homes in the \$100,000-plus range.
Many military families that had brought a range of life experiences to the community moved.	Evening enrollment at community college is about 75 percent lower without the military presence.
Skilled workers commuted long distances to other bases, or were retired, unemployed, underemployed, or no longer residing in the area.	Skilled workers continue to commute long distances to other bases.

<sup>1</sup> *Military Bases* (GAO/NSIAD-99-36, Dec. 11, 1998).

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In March 1998, DOD's Office of Economic Adjustment reported that 1,290 new jobs had been created from the community's reuse of the former naval air station. However, by October 2000, the reported number of jobs created dropped to 1,169. At the time of our 2001 visit, the former air station had only one tenant, who maintains the facility instead of paying rent under a negotiated 10-year lease agreement.

According to local officials, the most important factor contributing to economic recovery was the decision of the Texas Department of Criminal Justice to locate a prison complex on the former air base. The medium-security prison, completed in 1994, occupies less than a third of the former base and employs about 1,200 people. Without this prison and another prison complex built earlier adjacent to the former base, local officials believe Beeville would not have survived as a community.

Table 2 shows how the closure of Castle Air Force Base in September 1995 affected the surrounding communities and activities, as indicated by local officials during our visits in 1998 and 2001.

**Table 2: Community Impacts Resulting From the Closure of Castle Air Force Base, as Reported in 1998 and 2001**

**Overview**

Merced County is a rural area largely dedicated to agriculture and related industries, with much of its labor force seasonally employed in farming and canning. The county is ranked third of California's 58 counties in the percentage of population living in poverty. Even during seasons referred to as full employment, the unemployment rate remains high, around 14 percent; during the off season, the rate can rise to between 19 and 22 percent. The area is home to large Hmong and Punjabi populations, many of whom are first-generation immigrants that cannot speak English.<sup>a</sup>

As we reported in 1998	As we found during our recent visit in 2001
1997 unemployment rate of 15.4 percent.	2000 unemployment rate of 14.1 percent.
Average real per capita income growth (1991-95)—0.8 percent.	Average real per capita income growth (1996-99)—2.32 percent.
Real estate values in Atwater dropped 25 to 30 percent, partly because the government purchased departing military personnel's houses and placed them on the market. New housing construction stopped.	Housing starts have increased significantly over the last 2 years partly because Bay Area families have taken advantage of affordable residential housing. A new university campus is expected to open in 2004 causing an increase in real estate sales. Average home prices increased from \$114,000 to \$140,000.
Atwater schools lost enrollment and their tax base. The elementary school district had to reduce budget and staff, canceling some programs.	Atwater population increased 9.6 percent from 1996 to 2000. Merced population increased by 4.5 percent over the same period.
Local businesses had to reduce staff; some closed, and some changed ownership. Several small businesses closed, including restaurants, insurance vendors, and dry cleaners.	Many closed businesses, such as restaurants and other services, have not been replaced. There are vacant buildings throughout Atwater.
The community lost the military families, who contributed to local organizations such as churches and hospitals.	Former air base skilled workers continue to commute over 4 hours a day to the Bay Area, while others no longer reside in the area.

<sup>a</sup>Many Hmong immigrants from Laos, recruited and trained by the United States to conduct rescue missions and guerilla activity during the Vietnam war, migrated to the United States after the war to escape persecution. India's Punjabi began immigrating to California after World War II and settled largely in rural areas.

DOD's Office of Economic Adjustment reported an increase of 325 new jobs as a result of the redevelopment of Castle Air Force Base from 1998 to 2000. At the time of our 2001 visit, Cingular Wireless—the largest tenant on the former air base—employed 1,200 people at its call center. However, on July 25, 2001, Cingular announced that it was cutting 400 jobs at its Castle site because the number of calls and the size of the workforce had outgrown the center's space. In addition, 42 other tenants on the former air base employed about 310 individuals.

According to local officials, the closure of Castle had an immediate adverse effect on the unemployment rate, housing costs, and per capita income, but within several years these negative aspects were overcome. The strong national economy helped in this recovery, but Merced County's continuing growth is primarily a result of three factors. First, a new federal

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prison now occupies a portion of the former air base and employs 200 individuals. Second, because a new University of California campus is expected to open in the fall of 2004 and to eventually serve 25,000 students, real estate sales have begun to increase. Third, many Bay Area residents are purchasing more affordable homes in Merced County and commuting to their jobs in the Bay Area.